

# ITHOMIINAE (LEPIDOPTERA: NYMPHALIDAE): SUMMARY OF KNOWN LARVAL FOOD PLANTS<sup>1,2</sup>

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## ABSTRACT

The known interactions between the larvae of ithomiine butterflies and their host plants (about 400, 90% in the Solanaceae) are described in a table, illustrated, and briefly discussed.

The widespread and diversified use of plants in the family Solanaceae by man is reflected in the large number of applied scientific papers published on these plants (see the taxonomic index of any issue of *Biological Abstracts*). The alkaloidal nature of most plants in this family has led to their extensive use in folk and proprietary medicine, consciousness expansion, and recently as a source of pharmaceutical intermediates. Other important uses include fodder, fencing, support, insecticide, ornament, and perfume.

In tropical America, the most important groups of herbivores of Solanaceae are grasshoppers, chrysomelid and meloid beetles, and larvae of butterflies in the nymphalid subfamily Ithomiinae. These insects overcome the considerable physical and chemical defenses of these plants and turn them to their own use, at least as recognition cues, if not necessarily as protection against predation (Brown, 1987). Useful Solanaceae frequently attacked by Ithomiinae include *Lycopersicon*, *Cyphomandra*, *Solanum* sect. *Lasiocarpa*, and solasodine-producing or tobacco-substituting *Solanum*. Also regularly eaten are *Solanum tuberosum*, *S. melongena* and relatives, as well as *Capsicum* and *Physalis*. Many ornamental and medicinal Solanaceae (*Brunfelsia*, *Cestrum*, *Solandra*, *Markea* s.l., *Juanulloa*, *Brugmansia*, *Acnistus*, *Solanum pseudocapsicum* and *Solanum* sect. *Jasminosolanum*) are heavily damaged by ithomiine larvae. *Nicotiana* and *Petunia* seem to be immune to these herbivores.

This paper lists the known interactions (to mid-1985) between ithomiine butterflies and their lar-

val food plants, 90% in the Solanaceae (Table 1). It is the data base for papers by Drummond (1985), Brown (1985), and Brown & Drummond (in prep.). The 40 butterfly genera for which food plants are known or inferred are placed in phylogenetic order in the Table, grouped into tribes as first proposed by Fox (1961), followed basically by Mielke & Brown (1979), and modified by recent studies of early stages leading to a numerical phylogeny by Brown (in prep.). Nomenclature for the butterflies follows Mielke & Brown (1979) except in a few cases in which recent studies, especially of chromosomes, indicate changes in status. Nomenclature of the plants follows the thesis of Mary Fallen (1983, Hamburg) for Apocynaceae, recent compendia of the Solanaceae, and the *Index Kewensis*. We believe that identifications of both insect and plant taxa are accurate to the generic level in all cases, to the subgeneric level for *Solanum* in essentially all cases, and to the species level where given in the vast majority of cases. Many older records, either not confirmed or regarded as unlikely in view of broader recent studies, have been excluded from the list; these include especially those in the agricultural literature of Brazil, compiled in D'Arújo e Silva et al. (1968) and continuing up to the present day [such as a recent report of *Mechanitis lysimnia nesaea* Hübner as a pest of *Pasiflora edulis* Sims. in northeastern Brazil, clearly a misidentification of *Heliconius ethilla narcaea* (Godart) or *Eueides isabella dianasa* (Hübner), common in the area]. Doubtful records are marked with a question mark in parentheses,

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whereas sure records with tentative (unconfirmed) plant identifications are indicated by a simple question mark after the name. Localities and sources are coded and given at the end of the table. Numbers or letters in parentheses after a plant name are voucher symbols for that species.

The following genera (with number of species in parentheses) of Ithomiinae have yet to be observed or suspected as larvae on any plants; from preliminary field observations, they are predicted to use the solanaceous genera indicated in each case: *Roswellia* (1) (*Capsicum ciliatum*), *Patricia* (2) (*Dunalia*), a new genus near *Hyposcada* (1) (*Lycianthes*), *Paititia* (1) (*Cyphomandra*), *Artemfoxia* (1) and *Pagyris* (1) (*Witheringia*, *Dunalia*, *Brugmansia*, and relatives), and *Dygoris* (1) and *Veladyris* (1) (*Solanum* sect. *Geminata*, *Cestrum*).

The following genera of Solanaceae, with one or more species available to Ithomiinae in their tropical or subtropical moist habitats (genera restricted to dry habitats or temperate zones not included), have not yet been seen to be used by any species of Ithomiinae. Solanoideae: *Jaltomata*, *Athenaea* (expected for *Epityches* and *Ithomia*), *Larnax*, *Saracha*, *Iochroma*, *Deprea* (Solanaceae); *Jaborosa*, *Salpichroa* (Jaboroseae); *Lycium*, *Grabowskia* (Lycieae); *Trianaea* (Solanaceae). Cestroideae: *Sessea*, *Metternichia* (Cestreae); *Nicotiana*, *Petunia*, *Fabiana*, *Nierembergia*, *Bouchetia* (Nicotianeae); *Schwenkia*, *Protoschwenkia*, *Melananthus* (Schwenkieae); *Parabouchetia* (Parabouchetieae); *Leptoglossis*, *Browallia*, *Streptosolen* (Salpiglossideae); *Heteranthia* (tribal position unclear). While some of these genera may be found to be used by Ithomiinae with more observation, members of others have been watched for years within large Ithomiinae communities and have not been seen to support the larvae; in a few cases, ovipositions were followed by larval death (e.g., in Campinas, SP, *Mechanitis polymnia casabranca* Haensch has oviposited on both *Capsicum annuum* and

*Nicotiana* sp., but the larvae died without feeding or developing).

The complete picture of the known food plant relationships of the Ithomiinae, based on the data in the table, is presented in Figure 1, in which plant genera (from top to bottom) and butterfly tribes (from left to right) are arranged in phylogenetic order based on currently accepted evolutionary sequences (the vertical position of butterfly genera represents only convenience in presentation of the figure; details are given in the phylogeny of Brown, in prep.). The complexity of the relationships illustrated in the figure indicates that strong ecological influences may outweigh the presumed evolutionary history of the interactions. See papers by Drummond (1986) and Brown & Drummond (in prep.) for discussion of these aspects.

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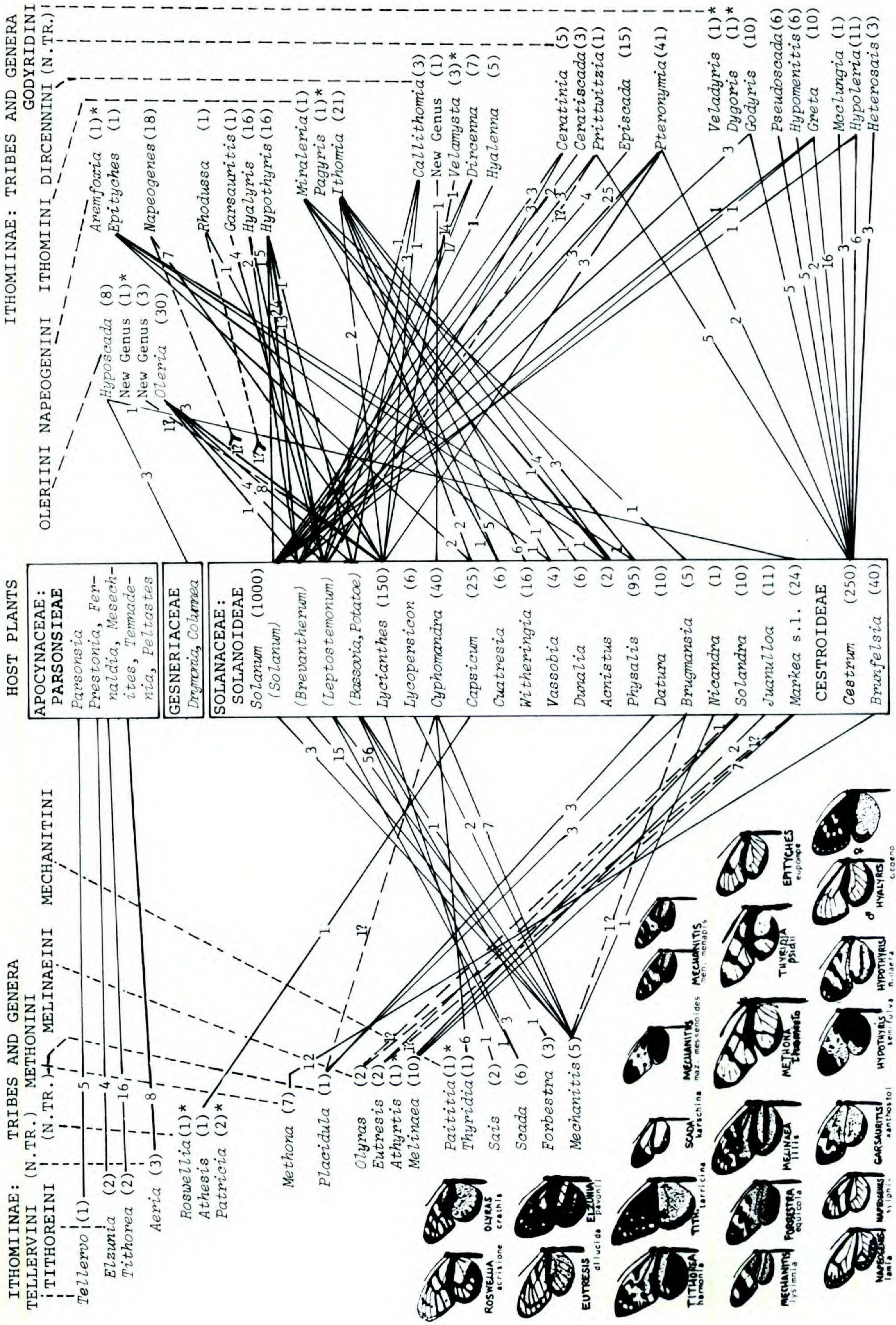


FIGURE 1. The Ithomiinae/Solanaceae interface. Numbers in parentheses refer to species in genus. Numbers on lines quantify interspecific interactions. Doubtful records followed by question mark. No host plants have been recorded for genera with asterisks.

TABLE 1. Ithomiine larval food plants.

Ithomiinae:		Host Plants <sup>1</sup> :		Locality <sup>2</sup>	Source <sup>3</sup>
Tribe, Genus, Species, and Subspecies	Genus (Subgenus or Section) and Species	Genus (Subgenus or Section) and Species	Locality <sup>2</sup>		
A) APOCYNACEAE FEEDERS					
TELLERVINI (Old World)					
<i>Tellervo zoilus</i> (Fabricius)		<i>Parsonsia</i> (5 species)		Queensland, New Guinea, Solomons	JAE
TITHOREINI					
<i>Elzunia humboldt bomplandii</i> (Guérin)		"Echitoid vine"		Col	KB
<i>pavonii</i> (Butler)		<i>Prestonia</i> sp.		SEc	SK
		"Echitoid vine"		NPer	KB/LG
		"Echitoid vine"		NPer	KB
		Apocyne		NPer	GL
		"Echites" (? = one of following)		CR	MF
<i>Tithorea tarricina pinthias</i> Godm. & Salv.		<i>Prestonia portobellensis</i> (Buerl.) Woodson		CR	WH
		<i>Prestonia guatemalensis</i> Woodson		EIS, CR	AM, LG
<i>harmonia salvadoris</i> Staudinger		<i>Fernaldia pandurata</i> (A. DC.) Woodson		EIS	AM
		<i>Prestonia guatemalensis</i> Woodson		EIS	AM
<i>helicaon</i> Godm. & Salv.		<i>Prestonia portobellensis</i> (Buerl.) Woodson		CR	WB
<i>furia</i> Staudinger		"Echitoid vine"		Ven	KB
<i>megara</i> (Godart)		"Echites" (? = following species)		Trin	JLG, MB
		<i>Mesechites trifida</i> Muell. Arg.		Trin	LG
<i>moppa</i> Bryk		"Echites"		Belém	MF
<i>lateflava</i> Haensch		"Echitoid vine"		Rond	KB
<i>pseudonyma</i> Staudinger		<i>Prestonia acutifolia</i> (S. Moore) Woodson		MTN	KB
<i>pseudethra</i> Butler		<i>Prestonia coalita</i> (Vell.) Woodson		Mogi	KB
		<i>Prestonia dusenii</i> (Malme) Woodson		Camp	KB
		<i>Prestonia acutifolia</i> (S. Moore) Woodson		Mogi	KB
		<i>Peltastes peltatus</i> (Vell.) Woodson		Camp	KB
		<i>Temnadenia violacea</i> Miers		Sum	KB
		"Echitoid vine"		Goiás	KB
<i>caissara</i> Zikán		<i>Prestonia coalita</i> (Vell.) Woodson		SNegra	KB
<i>neitha</i> Hopffer		<i>Prestonia acutifolia</i> (S. Moore) Woodson		Peru	KB
NEW TRIBE					
<i>Aeria eurimedia agna</i> Godman & Salvin		Apocyne (?)		Ven	KB
		"Echites" (? = following species)		Trin	JLG
		<i>Mesechites trifida</i> Muell. Arg.		Trin	LG, MB

TABLE 1. Continued.

Ithomiinae:		Host Plants <sup>1</sup> :		
Tribe, Genus, Species, and Subspecies	Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>	
<i>olena</i> Weymer	<i>Prestonia portobellensis</i> (Buerl.) Woodson	CR	WH	
	<i>Prestonia</i> sp.	CR	AY	
	<i>Prestonia coalita</i> (Vell.) Woodson	Camp	KB	
	<i>Prestonia dusenii</i> (Malme) Woodson	Camp	KB	
<i>elara elara</i> (Hewitson)	Apocynaceae	Goiás	KB	
	"Echites"	Rond	KB	
	"Echites"	MTN	KB	
B) SOLANACEAE FEEDERS				
NEW TRIBE				
<i>Athesis clearista</i> Doubleday	<i>Capsicum ciliatum</i> (Kunth) Kuntze	Ven	KB	
METHONINI				
<i>Methona confusa confusa</i> Butler	<i>Brunfelsia amazonica</i> Morton	Man	GL	
<i>confusa</i> ssp. nov.	<i>Brunfelsia dwyeri</i> D'Arcy	Pan	GS	
<i>confusa psamathe</i> Godm. & Salv.	<i>Brunfelsia grandiflora</i> D. Don	San-Ec, Barn	KB	
	<i>Brunfelsia</i> sp. (7330)	Lim	BD	
	<i>Brunfelsia pauciflora</i> (Cham. & Schldl.) Benth.	Lim	BD	
<i>megisto</i> (Felder & Felder)	<i>Brunfelsia mire</i> Monachino	Rond	KB	
	<i>Brunfelsia martiana</i> Plowman	Man	KB	
	<i>Brunfelsia grandiflora</i> D. Don	Man	KB	
<i>singularis</i> (Staudinger)	<i>Brunfelsia uniflora</i> (Pohl) D. Don	Pnb	GL	
<i>themisto</i> (Hübner)	<i>Brunfelsia australis</i> Benth.	RGS, Camp	GL, KB	
	<i>Brunfelsia pauciflora</i> (Cham. & Schldl.) Benth.	Camp, Arg	KB, KH	
	<i>Brunfelsia uniflora</i> (Pohl) D. Don	Rio	KB	
NEW TRIBE				
<i>Placidula euryanassa</i> (Felder & Felder)	<i>Datura stramonium</i> L.	UR	CB	
	<i>Datura metel</i> L.	UR	CB	
	<i>Datura fastuosa</i> L.	UR	CB	
	<i>Brugmansia suaveolens</i> (Willd.) Sweet	RGS	CB	
	<i>Brugmansia candida</i> Pers.	Rio	RFD	
	<i>Brugmansia arborea</i> (L.) Lagerheim	RGS	CB	
	<i>Cyphomandra crassicaulis</i> (Ortm.) Kuntze (?)	RGS	CB	

TABLE 1. Continued.

Ithomiinae:		Host Plants:	
Tribe, Genus, Species, and Subspecies	Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>
<b>MELINAEINI</b>			
<i>Olyras crathis staudingeri</i> Godm. & Salv.	<i>Solandra grandiflora</i> Swartz (?)	CR	WH
<i>crathis</i> Doubl. & Hewitson (reared on <i>Juanulloa mexicana</i> )	<i>Markea (Schultesianthus) megalandra</i> (Dunal) D'Arcy (?)	Ven	KB
<i>Eutresis hypereia theope</i> Godm. & Salv.	<i>Solandra grandiflora</i> Swartz (?)	CR	WH
<i>hypereia</i> Dblday. & Hew. (oviposited on <i>Juanulloa mexicana</i> )	<i>Markea (Schultesianthus) megalandra</i> (Dunal) D'Arcy (?)	Ven	KB
<i>Melinaea mneme mneme</i> (Linnaeus)	<i>Markea coccinea</i> Rich. (?)	Man	KB
<i>mauensis</i> Weymer	<i>Markea coccinea</i> Rich.	Marajó	KB
<i>ludovica ludovica</i> (Cramer)	<i>Markea</i> sp.	Belém	MF
<i>paraiya</i> Reakirt	<i>Markea (Dysochroma) viridiflora</i> (Sims) Miers	Rio, SV	KB
<i>lilis imitata</i> Bates	<i>Juanulloa mexicana</i> (Schldl.) Miers	Mex, CR	LG
	<i>Markea (Merinthopodium) neurantha</i> Hems.	CR	WH, LG
	<i>Solandra grandiflora</i> Swartz	CR	LG
<i>parallelis</i> Butler	<i>Markea (Schultesianthus) leucantha</i> F. D. Smith	Pan	KB
<i>marsaeus pothete</i> D'Almeida	<i>Markea (Hawkesiophyton) ulei</i> (Dammer) Cuatrec.	Rond	KB
<i>menophilus menophilus</i> (Hewitson) ssp. nov.	<i>Juanulloa mexicana?</i> (Schlecht.) Miers	Lim	BD
	<i>Markea (Hawkesiophyton) ulei</i> (Dammer) Cuatrec.	Rond	KB
<b>MECHANITINI</b>			
<i>Thyridia psidii melantho</i> (Bates)	<i>Cyphomandra hartwegii</i> (Miers) Dunal	CR	WB, WH
	<i>Cyphomandra crassicaulis</i> (Ortm.) Kuntze	CR	BL
<i>aedesia</i> (Doubleday)	<i>Cyphomandra diversifolia</i> (Dunal) Bitter	Ven	FA-Mar
	<i>Cyphomandra crassicaulis</i> (Ortm.) Kuntze	Ven	RMF
<i>ino</i> (Felder & Felder)	<i>Cyphomandra hartwegii</i> (Miers) Dunal	Lim	BD
<i>cetoides</i> (Ros. & Talbot)	<i>Cyphomandra divaricata</i> Sendtner	Camp	JVN, RM
	<i>Cyphomandra fragrans</i> (Hook.) Sendtner	Camp	KB
	<i>Cyphomandra sciadostylis</i> Sendtner	SNegra	KB
	<i>Cyphomandra crassicaulis</i> (Ortm.) Kuntze	Camp	KB
<i>Sais rosalia brasiliensis</i> Talbot	<i>Lycianthes</i> sp. (decumbent)	Goiás	KB
<i>Scada zibia xanthina</i> (Bates)	<i>Solanum (Bassovia?) enchylozum</i> Bitter	CR	WH
	<i>Solanum (Micracantha) siparunoides</i> Ewan	CR	WH
<i>batesi batesi</i> Haensch	<i>Solanum (Bassovia?)</i> sp.	Lim	BD
<i>reckia</i> nr. <i>theaphia</i> (Bates)	<i>Solanum (Bassovia) nr. trizygum</i> Bitter	Rond	KB

TABLE 1. Continued.

Ithomiinae:	Host Plants: Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>
Tribe, Genus, Species, and Subspecies			
<i>Forbestra olivencia juntana</i> (Haensch)	<i>Solanum (Bassovia) anceps</i> Rich.	Lim	BD
<i>Mechanitis polymnia isthmia</i> Bates	<i>Solanum (Brevantherum) schlechtendalianum</i> Walp.	CR	WH
	<i>Solanum (Brevantherum) asperum</i> Rich.	CR	WH
	<i>Solanum (Leptostemonum) ochraceoferrugineum</i> (Dunal) Fern.	CR	AY/M
	<i>Solanum (Leptostemonum) hispidum</i> Pers.	CR	WH, AY/M
	<i>Solanum (Leptostemonum) jamaicense</i> Miller	CR	WH
	<i>Solanum (Micracantha) lancaeiifolium</i> Jacq.	CR	LG, WH
	<i>Solanum (Leptostemonum) melongena</i> L.	Ven	FA-Mar
<i>veritabilis</i> Butler	<i>Solanum (Lasiocarpa) hirtum</i> Vahl.	Ven	R/P
	<i>Solanum (Lasiocarpa) sessiliflorum</i> Dunal	Ven	FA-Mar
<i>kayei</i> Fox	<i>Solanum (Leptostemonum) sp.</i>	Trin	MB
<i>dorissides</i> Staudinger	<i>Solanum (Solanum) sp.</i>	Lim	BD
	<i>Solanum (Lasiocarpa) sessiliflorum</i> Dunal	Lim	BD
	<i>Solanum (Lasiocarpa) quitoense</i> Lam.	Lim	BD
	<i>Lycopersicon esculentum</i> Miller	Lim	BD
	<i>Cyphomandra hartwegii</i> (Miers) Dunal	Lim	BD
<i>eurydice</i> Haensch	<i>Solanum (Brevantherum) sp.</i>	Peru	RMF
<i>angustifascia</i> Talbot	<i>Solanum (Brevantherum) goodspeedii</i> Roe	Bol	KB
	<i>Solanum (Lasiocarpa) stramoniiifolium</i> Jacq.	Rond	KB
	<i>Solanum (Brevantherum) sp.</i>	Bra	DS
<i>polymnia</i> (Linnaeus)	<i>Solanum (Leptostemonum) sp.</i>	Belém	KB
	<i>Solanum (Leptostemonum) sisymbriifolium</i> Lam.	Bra	DS
	<i>Solanum (Leptostemonum) crinitum</i> Lam.	Man	KB
	<i>Solanum (Acanthophora) aculeatissimum</i> Jacq.	Sur	JS
	<i>Solanum (Brevantherum) concinnum</i> Schldl. ex Sendter	Camp	KB
	<i>Solanum (Brevantherum) megalochiton</i> C. Martius	Sum	JVN
	<i>Solanum (Brevantherum) mauritianum</i> Scop.	Sum	JVN
	<i>Solanum (Brevantherum) granuloso-leprosum</i> Dunal	Mogi	RM
	<i>Solanum (Leptostemonum) sp.</i>	Brsl	KB
	<i>Solanum (Leptostemonum) variabile</i> C. Martius	Sum	JVN
	<i>Solanum (Leptostemonum) paniculatum</i> L.	Sum	JVN
	<i>Solanum (Leptostemonum) melongena</i> L.	Camp	KB
	<i>Solanum (Leptostemonum) robustum</i> Wendl.	Sum	JVN
	<i>Solanum (Leptostemonum) incarceratum</i> Ruiz & Pavón	Bra	DS
	<i>Solanum (Leptostemonum) torvum</i> Swartz	Rio	KB





TABLE 1. Continued.

Ithomiinae:	Host Plants <sup>1</sup> :	Locality <sup>2</sup>	Source <sup>3</sup>
Tribe, Genus, Species, and Subspecies	Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>
	<i>Solanum (Leptostemonum) sisymbriifolium</i> Lam.	RGS	CB
	<i>Solanum (Leptostemonum) agrarium</i> Sendtner	Bra	DS
	<i>Solanum (Leptostemonum) robustum</i> Wendl.	Bra	DS
	<i>Solanum (Leptostemonum) sp. (Joá manso)</i>	Bra	DS
	<i>Solanum (Leptostemonum) brusquense</i> Lyman B. Smith & Downs	Sum	JVN
	<i>Solanum (Leptostemonum) arcuatum</i> Sendtner	Camp	KB
	<i>Solanum (Leptostemonum) fastigiatum</i> Willd.	PCal, SV	KB
	<i>Solanum (Leptostemonum) variabile</i> C. Martius	Sum	JVN
	<i>Solanum (Leptostemonum) paniculatum</i> L.	Sum	JVN
	<i>Solanum (Leptostemonum) sp.</i>	Brsl	KB
	<i>Solanum (Leptostemonum) torvum</i> Swartz	Rio, SV	KB
	<i>Solanum (Leptostemonum) sp.</i>	Rio	KB
	<i>Solanum (Acanthophora) aculeatissimum</i> Jacq.	Rio	RFD
	<i>Solanum (Acanthophora) jatrophiifolium</i> Sch.	Sum	JVN
	<i>Solanum (Acanthophora) atropurpureum</i> Schrank	Sum	JVN
	<i>Solanum (Acanthophora) capsicoides</i> All.	Sum, MG	JVN, KB
	<i>Solanum (Acanthophora) acerosum</i> Sendtner	PCal	KB
	<i>Solanum (Acanthophora) viarum</i> Dunal	Sum	JVN
	<i>Solanum (Potatoe) tuberosum</i> L.	Bra	CB
	<i>Lycopersicon esculentum</i> Miller	Bra	CB, KB
	<i>Cyphomandra velutina</i> Sendtner	Bra	DS
	<i>Cyphomandra fragrans</i> (Hook.) Sendtner	Camp	KB
	<i>Cyphomandra sciadostylis</i> Sendtner	Rio	NM
	<i>Cyphomandra crassicaulis</i> (Ortm.) Kuntze	Itat	KB
	<i>Brugmansia arborea</i> (L.) Lagerheim	RGS	CB
	<i>Nicandra physaloides</i> (L.) Gaertn.	PCal	KB
OLERIINI			
	<i>Hyposcada egra</i> (Hewitson)	Man	KB
	<i>virginiana evanides</i> Haensch (Gesneriaceae feeder?)	CR	WH
		CR	WH
		CR	WH

TABLE 1. Continued.

Tribe, Genus, Species, and Subspecies	Host Plants <sup>1</sup> : Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>
Ithomiinae:			
New genus <i>canilla</i> (Hewitson)	<i>Lycianthes</i> sp. (?)	Peru	KB
<i>Oleria victorine paula</i> (Weymer)	<i>Lycianthes</i> nr. <i>multiflora</i> Bitter	CR	WH
<i>vicina</i> (Salvin)	<i>Lycianthes multiflora</i> Bitter	CR	WH
<i>makrena</i> (Hewitson)	<i>Solanum (Bassovia) trizygum</i> Bitter	CR	WH
<i>agarista</i> (Felder)	<i>Solanum (Bassovia) trizygum</i> Bitter	Ven	FA-Mar
	<i>Lycianthes maxonii</i> Standley	Lim	BD
	<i>Solanum (Potatoe) evolvulifolium</i> Greenman	Lim	BD
	<i>Solanum (Bassovia) sp. (7319)</i>	Lim	BD
	<i>Solanum (Micracantha) sp. (7310)</i>	Lim	BD
<i>janarilla</i> (Hewitson)	<i>Solanum (Bassovia) sp.</i>	Peru	SK
<i>zelica pagasa</i> (Druce)	<i>Solanum (Potatoe) evolvulifolium</i> Greenman	CR	AY
<i>rubescens</i> (Butler & Druce)	<i>Solanum (Micracantha) siparunoides</i> Ewan	CR	WH
<i>astrea</i> ssp. nov.	<i>Solanum (Potatoe) nr. chacoense</i> Bitter	Rond	KB
<i>burchelli</i> (Sanders)	<i>Solanum (Leptostemonum) insidiosum</i> C. Martius	Rond	KB
<i>thiemei</i> (Oberthür)	<i>Solanum (Lasiocarpa) stagnale</i> Moric.	BA	KB
<i>aquata</i> (Weymer)	<i>Solanum (Lepidota) swartzianum</i> Roemer & Schultes	MG	KB
<i>crispinilla</i> (Hopffer)	<i>Solanum (Potatoe) nr. chacoense</i> Bitter	Peru	KB
NAPEOGENINI			
<i>Epityches eupompe</i> (Geyer)	<i>Capsicum mirabile</i> C. Martius ex Sendtner	Rio	FM
	<i>Capsicum flexuosum</i> Sendtner	Japi	KB
	<i>Vassobia breviflora</i> (Sendtner) Hunziker	RGS	KB
	<i>Acnistus arborescens</i> (L.) Schldl.	Camp	KB
	<i>Physalis neesiana</i> Sendtner	RGS	KB
	<i>Lycianthes nr. multiflora</i> Bitter	CR	WH
	<i>Lycianthes sp.</i>	CR	WH
	<i>Solanum sp. (?)</i>	CR	WH
	<i>Lycianthes sp.?</i>	Rond	KB
	<i>Lycianthes sp.?</i> (7325)	Lim	BD
	<i>Lycianthes sp.</i>	Rond	KB
	<i>Lycianthes sp.?</i>	Col	KB
	<i>Lycianthes howardiana</i> D'Arcy	Lim	BD
	<i>Lycianthes sp.?</i>	Pnb	KB
	<i>Solanum (Jasminosolanum) sp.</i>	Rond	KB
	<i>Lycianthes sp.</i>	Acre	KB
<i>Napeogenes tolosa amara</i> Godman			
	<i>duessa jamariensis</i> D'Almeida		
	<i>sylphis caucayaensis</i> Fox & Real		
	<i>acreana</i> D'Almeida		
	<i>inachia johnsoni</i> Fox & Real		
	<i>avila</i> Haensch		
	<i>sulphurina</i> Bates		
<i>Rhodussa cantobrica nundina</i> D'Almeida			

TABLE 1. Continued.

Ithomiinae:	Host Plants <sup>1</sup> :			Locality <sup>2</sup>	Source <sup>3</sup>
Tribe, Genus, Species, and Subspecies	Genus (Subgenus or Section) and Species				
<i>Garsauritis xanthostola xanthostola</i> (Bates)	<i>Solanum (Leptostemonum) insidiosum</i> C. Martius			Man	KB
	<i>Solanum (Leptostemonum) sp.</i>			Faro	KB
<i>desmora</i> (Haensch)	<i>Solanum (Micracantha) lancaefolium</i> Jacq.			Man	KB
<i>Hyalyris oulita cana</i> (Haensch)	<i>Solanum (Micracantha) coriaceum</i> Dunal			Rrpl	KB
ssp. nov.	<i>Solanum (Lasiocarpa) hirtum</i> Vahl.			Ven	FA-Mar
<i>metella</i> (Hopffer)	<i>Solanum (Brevantherum?) sp.</i>			San-Ec	KB
	<i>Solanum (Leptostemonum) nr. variabile</i> C. Martius			Peru	KB
<i>excelsa decumana</i> (Godm. & Salv.)	<i>Solanum (Brevantherum) appressum</i> Roe			Peru	KB
	<i>Solanum (Leptostemonum) accrescens</i> Standley & Morton			CR	WH
ssp. nov.	<i>Solanum (Micracantha) siparunoides</i> Ewan			CR	WH
<i>Hypothyris ninonia completomaculata</i> (Zikán)	<i>Solanum (Lasiocarpa) hirtum</i> Vahl			Ven	KB
<i>completa</i> (Haensch)	<i>Solanum (Lasiocarpa) sessiliflorum</i> Dunal			7Lg	KB
<i>neimyi</i> (Riley)	<i>Solanum (Brevantherum) schlehtendalianum</i>			Man	KB
<i>daeta</i> (Boisduval)	<i>Solanum (Lepidota) sp. A</i>			Rond	KB
	<i>Solanum (Lepidota) sp. B</i>			Rond	KB
	<i>Solanum (Jasminosolanum) flaccidum</i> Vell.			Mogi	KB
	<i>Solanum (Lepidota) murinum</i> Sendtner			Camp	JVN
	<i>Solanum (Indubitaria) sp.</i>			RCI	KB
	<i>Solanum (Brevantherum) concinnum</i> Schott ex Sendtner			Camp	KB
	<i>Solanum (Brevantherum) gemellum</i> C. Martius ex Sendtner			Itat	KB
	<i>Solanum (Brevantherum) megalochiton</i> C. Martius			Sum	JVN
	<i>Solanum (Lepidota) argenteum</i> Dunal ex Poiret			Rio	RFD
	<i>Solanum (Lepidota) swartzianum</i> Roemer & Schultes			Camp	JVN
	<i>Solanum (Brevantherum) mauritianum</i> Scop.			Sum	JVN
	<i>Solanum (Leptostemonum) racemiflorum</i> Dunal			Rio	JFZ
	<i>Solanum (Leptostemonum) insidiosum</i> C. Martius			Camp	KB
	<i>Solanum (Leptostemonum) variabile</i> C. Martius			Camp	JVN
	<i>Solanum (Leptostemonum) robustum</i> Wendl.			Sum	JVN
	<i>Solanum (Leptostemonum) paniculatum</i> L.			Sum	JVN
	<i>Solanum (Leptostemonum) torvum</i> Swartz			Rio	KB
	<i>Solanum (Leptostemonum) brusquense</i> Lyman B. Smith & Downs			Sum	JVN
<i>fluonia berna</i> (Haensch)	<i>Solanum (Micracantha) sp. (7311)</i>			Lim	BD
<i>semifulva satura</i> (Haensch)	<i>Solanum (Brevantherum) schlehtendalianum</i> Walp.			Lim	BD

TABLE 1. Continued.

Tribe, Genus, Species, and Subspecies	Host Plants: Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>
Ithomiinae:			
<i>daphnis amapaensis</i> Brown	<i>Solanum (Brevantherum) asperum</i> Rich.	Amp	KB
<i>daphnoides</i> D'Almeida	<i>Solanum (Brevantherum?)</i> sp.	Ror	KB
<i>daphnis</i> D'Almeida	<i>Solanum (Brevantherum) rugosum</i> Dunal	Car	KB
<i>mamercus</i> ssp. nov.	<i>Solanum (Brevantherum) rugosum</i> Dunal	Rond	KB
<i>leprieuri</i> ssp. nov.	<i>Solanum (Leptostemonum) insidiosum</i> C. Martius	Rond	KB
	<i>Solanum (Micracantha) coriaceum</i> Dunal	Ror	KB
	<i>Solanum (Micracantha) lancaeifolium</i> Jacq.	Rond	KB
<i>Hypothyris euclea leucania</i> (Bates)	<i>Solanum (Brevantherum) rugosum</i> Dunal	CR	LG, AY
	<i>Solanum (Brevantherum) umbellatum</i> Miller	CR, Pan	LG, KB
<i>euclea</i> (Godart)	<i>Solanum (Brevantherum) asperum</i> Rich.	Ven	FA-Mar
	<i>Solanum (Brevantherum) sp.</i> ("tabacote")	Ven	FA-Mar
<i>intermedia</i> (Butler)	<i>Solanum (Brevantherum) bicolor</i> Willd. ex Roemer & Schultes	Lim	BD
<i>tenna</i> (Haensch)	<i>Solanum (Brevantherum) nr. asperum</i> Rich.	San-Ec	KB
<i>barii</i> (Bates)	<i>Solanum (Brevantherum) asperum</i> Rich.	Man, Amp	JVN, KB
<i>nr. barii</i> (Bates)	<i>Solanum (Brevantherum) rugosum</i> Dunal	Tuc	KB
	<i>Solanum (Brevantherum) asperum</i> Rich.	Rond	KB
<i>laphria</i> (Doubleday)	<i>Solanum (Brevantherum) rugosum</i> Dunal	Rond	KB
	<i>Solanum (Lasiocarpa) stramonifolium</i> Jacq.	Rond	KB
<i>laphria</i> × <i>nina</i> (Haensch)	<i>Solanum (Brevantherum) asperum</i> Rich.	Linh	KB
	<i>Solanum (Brevantherum) rugosum</i> Dunal	Linh	KB
	<i>Solanum (Brevantherum) mauritianum</i> Scop.	Camp	KB, JVN
	<i>Solanum (Brevantherum) granuloso-leprosum</i> Dunal	Mogi	PCM
ITHOMINI			
<i>Miraleria cymothoe cymothoe</i> (Hewitson)	<i>Cuatresia riparia</i> (Kunth) Hunziker	Ven	FA-Mar
	<i>Dunalia solanacea</i> Kunth	Ven	KB
	<i>Acnistus arborescens</i> (L.) Schldl.	Ven	FA-Mar
<i>Ithomia diasia hippocrenis</i> Bates	<i>Brugmansia suaveolens</i> (Willd.) Sweet	Ven	FA-Mar
	<i>Lycianthes</i> sp.? (6)	CR	LG
	<i>Witheringia asterotricha</i> (Standley) Hunziker	CR	WH
	<i>Witheringia solanacea</i> L'Her.	CR	WH
<i>patilla</i> Hewitson	<i>Lycianthes multiflora</i> Bitter	CR	WH
	<i>Witheringia solanacea</i> L'Her.	CR	WH
<i>lichyi</i> D'Almeida	<i>Capsicum lucidum</i> (Moricand) Kuntze	CR	LG, WH
	<i>Capsicum flexuosum</i> Sendtner	MG	KB
	<i>Capsicum villosum</i> Sendtner (?)	Japi	KB
		Japi	KB

TABLE 1. Continued.

Ithomiinae:		Host Plants <sup>1</sup> :		
Tribe, Genus, Species, and Subspecies	Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>	
<i>amarilla</i> Haensch	<i>Cuatresia</i> sp. (7327)	Lim	BD	
<i>celeemia plaginota</i> Butler & Druce	<i>Cuatresia riparia</i> (Kunth) Hunziker	CR	WH	
<i>iphianassa iphianassa</i> Dbldy. & Hew.	<i>Cuatresia riparia</i> (Kunth) Hunziker	Ven	FA-Mar	
	<i>Witheringia solanacea</i> L'Her.	Ven	FA-Mar	
<i>heraldica</i> Bates	<i>Cuatresia riparia</i> (Kunth) Hunziker	CR	WH	
	<i>Witheringia morii</i> D'Arcy	CR	WH, LG	
<i>xenos</i> (Bates)	<i>Acnistus arborescens</i> (L.) Schldl.	CR	WH	
	<i>Cuatresia riparia</i> (Kunth) Hunziker	CR	WH	
	<i>Witheringia cuneata</i> (Standley) Hunziker	CR	WH	
<i>drymo drymo</i> Hübner	<i>Acnistus arborescens</i> (L.) Schldl.	CR	WH	
<i>agnosia agnosia</i> Hewitson	<i>Acnistus arborescens</i> (L.) Schldl.	Camp	KB	
	<i>Vassobia breviflora</i> (Sendtner) Hunziker	Camp	KB	
	<i>Acnistus arborescens</i> (L.) Schldl.	Camp	KB	
<i>derasa salapia</i> Hewitson	<i>Physalis pubescens</i> L.	Lim	BD	
	<i>Physalis angulata</i> L.	Rond	KB	
	<i>Physalis angulata</i> L.	Lim	BD	
DIRCENNINI				
<i>Callithomia hezia hezia</i> (Hewitson)	<i>Lycianthes sanctae-clarae</i> Greenman & Donn.	CR	WH	
	<i>Solanum</i> ( <i>Androceras</i> ) nr. <i>granelianum</i> D'Arcy	CR	WB	
<i>lenea travassosi</i> D'Almeida	<i>Solanum</i> ( <i>Jaminosolanum</i> ) <i>pensile</i> Sendtner	Rond	KB	
	<i>Solanum</i> ( <i>Leptostemonum</i> ) <i>grandiflorum</i> Ruiz & Pavón	MTN	KB	
	<i>Solanum</i> ( <i>Jaminosolanum</i> ) <i>flaccidum</i> Vell.	Mogi	KB	
New genus <i>lonera</i> (Butler & Druce)	<i>Cyphomandra hartwegii</i> (Miers) Dunal	CR	LG, WH	
<i>Velamysta cruxifera</i> (Hewitson)	<i>Lycianthes</i> sp.	B-Ec	KB	
<i>Hyalenna pascua</i> (Schaus)	<i>Solanum</i> ( <i>Brevantherum</i> ) nr. <i>schwackeanum</i> Lyman B. Smith & Downs	Japi	KB	
<i>Dircenna adina marica</i> (Felder & Felder)	<i>Solanum</i> ( <i>Brevantherum</i> ) nr. <i>hazenii</i> Bitter	Ven	KB	
	<i>Solanum</i> ( <i>Brevantherum</i> ) nr. <i>asperum</i> Rich.	San-Ec	KB	
<i>loreta acreana</i> D'Almeida	<i>Solanum</i> ( <i>Leptostemonum</i> ) <i>grandiflorum</i> Ruiz & Pavón	Rond	KB	
	<i>Solanum</i> ( <i>Leptostemonum</i> ) <i>insidiosum</i> C. Martius	Rond	KB	
	<i>Solanum</i> ( <i>Lasiocarpa</i> ) <i>stramoniifolium</i> Jacq.	Rond	KB	
	<i>Solanum</i> ( <i>Lasiocarpa</i> ) <i>sessiliflorum</i> Dunal	Rond	KB	
<i>Dircenna klugii</i> (Geyer)	<i>Solanum</i> ( <i>Brevantherum</i> ) sp. (22)	CR	LG	
	<i>Solanum</i> ( <i>Brevantherum</i> ) nr. <i>rugosum</i> Dunal	CR	LG	

TABLE 1. Continued.

Ithomiinae:	Host Plants: Tribe, Genus, Species, and Subspecies	Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>
		<i>Solanum (Brevantherum) umbellatum</i> Miller	CR	WH
		<i>Solanum (Leptostemonum) hispidum</i> Pers.	CR	WH
		<i>Solanum (Leptostemonum) ochraceo-ferrugineum</i> (Dunal) Fern.	CR	WH
		<i>Solanum (Leptostemonum) torvum</i> Swartz	Mex	DM
		<i>Solanum (Micracantha) lancaeiifolium</i> Jacq.	CR	LG
	<i>relata</i> Butler & Druce	<i>Solanum (Brevantherum) cordavense</i> Sessé & Moc.	CR	WH
		<i>Solanum (Brevantherum) nr. rugosum</i> Dunal	CR	LG
		<i>Solanum (Brevantherum) umbellatum</i> Miller	CR	WH
		<i>Solanum (Leptostemonum) hispidum</i> Pers.	CR	AY
	<i>olyras</i> (Felder & Felder)	<i>Solanum (Brevantherum) cordavense</i> Sessé & Moc.	CR	WH
		<i>Solanum (Brevantherum) umbellatum</i> Miller	CR	WH
	<i>jemima</i> ssp. nov. ("chiriquensis")	<i>Solanum (Micracantha) siparunoides</i> Ewan	CR	WH
	<i>jemima</i> (Geyer)	<i>Solanum (Brevantherum) hazenii</i> Bitter	Ven	KB
	<i>dero euchytma</i> (Felder & Felder)	<i>Solanum (Leptostemonum) ochraceo-ferrugineum</i> (Dunal) Fern.	CR	LG, WH
	<i>celtina</i> Burmeister	<i>Solanum (Brevantherum) megalochiton</i> C. Martius	Sum	JVN
		<i>Solanum (Brevantherum) mauritianum</i> Scop.	Sum	JVN
		<i>Solanum (Leptostemonum) variabile</i> C. Martius	Sum	JVN
		<i>Solanum (Leptostemonum) robustum</i> Wendl.	Sum	JVN
		<i>Solanum (Leptostemonum) paniculatum</i> L.	Sum	JVN
		<i>Solanum (Leptostemonum) torvum</i> Swartz	Rio	KB
		<i>Solanum (Leptostemonum) incarceratum</i> Ruiz & Pavón	RGS	CB
		<i>Solanum (Leptostemonum) sisymbriifolium</i>	RGS	CB
NEW TRIBE				
	<i>Ceratinia neso zikani</i> D'Almeida	<i>Solanum (Leptostemonum) insidiosum</i> C. Martius	Rond	KB
		<i>Solanum (Lasiocarpa) stramoniifolium</i> Jacq.	Rond	KB
		<i>Solanum (Leptostemonum) sp.</i>	Bel	KB
	<i>poecila poecila</i> (Bates)	<i>Solanum (Geminata) antillarum</i> Schulz	Lim	BD
	<i>tutia dorilla</i> (Bates)	<i>Solanum (Geminata) antillarum</i> Schulz	CR	WH
	<i>tutia</i> (Hewitson)	<i>Solanum (Geminata) sp.</i>	Ven	FA-Mar
	<i>Ceraticada canaria</i> Brown & D'Almeida	<i>Solanum (Geminata) laxiflorum</i> Sendtner	ES	KB
	<i>hymen</i> (Haensch)	<i>Solanum (Geminata) sp. (7336)</i>	Lim	BD
	<i>Prittitzia hymenaea hymenaea</i> (Prittitz)	<i>Solanum (Geminata) caavurana</i> Vell.	Camp, Japi	KB
		<i>Solanum (Geminata) sp.?</i>	Rio	KB
		<i>Solanum (Pseudocapsica) pseudocapsicum</i> L.	Camp	KB
		<i>Solanum (Leptostemonum) sisymbriifolium</i> Lam. (?)	RGS	CB

TABLE 1. Continued.

Tribe, Genus, Species, and Subspecies	Host Plants: Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>
	<i>Cestrum nocturnum</i> L.	RGS	CB
	<i>Cestrum parqui</i> L.	RGS	CB
	<i>Cestrum sendnerianum</i> C. Martius	Camp	KB
	<i>Cestrum schlechtendalii</i> G. Don	Camp	KB
	<i>Cestrum laevigatum</i> Schldl.	Camp	KB
<i>Episcada salvinia</i> (Bates)	<i>Solanum</i> ( <i>Geminata</i> ) <i>antillarum</i> Schulz	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) <i>nudum</i> Humb. & Bonpl. ex Dunal	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) sp. (?)	Col	KB
	<i>Solanum</i> ( <i>Geminata</i> ) <i>caavurana</i> Vell.	Rio	KB
<i>Pteronymia artena artena</i> (Hewitson)	<i>Lycianthes multiflora</i> Bitter	CR	WH
	<i>Lycianthes escuillensis</i> (Coult.) D'Arcy	CR	WH
	<i>Lycianthes synanthera</i> (Sendtner) Bitter	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) sp.?	Ven	FA-Mar
	<i>Solanum</i> ( <i>Geminata</i> ) <i>antillarum</i> Schulz	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) <i>arboreum</i> Humb. & Bonpl. ex Dunal	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) <i>brenesii</i> Morton & Standley	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) sp. (A)	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) sp. (B)	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) sp. (C)	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) sp. (D)	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) sp. (E)	CR	WH
<i>cotyto</i> (Guérin)	<i>Solanum</i> ( <i>Geminata</i> ) <i>nudum</i> Humb. & Bonpl. ex Dunal	CR	WH
<i>agalla</i> Godman & Salvin	<i>Solanum</i> ( <i>Geminata</i> ) <i>brenesii</i> Morton & Standley	CR	WH
<i>notilla</i> Butler & Druce	<i>Solanum</i> ( <i>Geminata</i> ) <i>roblense</i> Bitter	CR	LG
	<i>Solanum</i> ( <i>Geminata</i> ) <i>arboreum</i> Humb. & Bonpl. ex Dunal	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) <i>brenesii</i> Morton & Standley	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) sp.	CR	WH
	<i>Solanum</i> ( <i>Geminata</i> ) sp.	CR	WH
	<i>Cestrum megalophyllum</i> Dunal	CR	AY
<i>carlia</i> Schaus	<i>Solanum</i> ( <i>Geminata</i> ) <i>caavurana</i> Vell.	Camp	KB
	<i>Solanum</i> ( <i>Pseudocapsica</i> ) <i>pseudocapsicum</i> L.	Camp	KB
	<i>Solanum</i> ( <i>Lepidota</i> ) <i>argenteum</i> Dunal ex Poiret	RGS	CB
	<i>Solanum</i> ( <i>Lepidota</i> ) <i>swartzianum</i> Roemer & Schultes	Camp, RCI	RM, KB
	<i>Cestrum laevigatum</i> Schldl.	Camp	KB
	<i>Solanum</i> ( <i>Geminata</i> ) sp.	Japi	KB

TABLE 1. Continued.

Ithomiinae:		Host Plants <sup>1</sup> :		
Tribe, Genus, Species, and Subspecies	Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>	
<i>fulvescens</i> Godm. & Salv.	<i>Solanum (Geminata) brenesii</i> Morton & Standley	CR	WH	
<i>fulvimargo</i> Butl. & Druce	<i>Solanum (Geminata)</i> nr. <i>Antillarum</i> Schultz	CR	WH	
<i>latilla</i> (Hewitson)	<i>Solanum (Geminata)</i> nr. <i>ripense</i>	Ven	KB	
<i>vestilla sparsa</i> Haensch	<i>Solanum (Geminata)</i> nr. <i>nudum</i> Humb. & Bonpl. ex Dunal	Lim	BD	
<i>hemixanthe</i> (Feld. & Feld.)	<i>Solanum (Brevantherum)</i> sp.?	BA	KB	
<i>euritea</i> (Cramer)	<i>Solanum (Geminata) pseudoquina</i> St. Hil.	ES	KB	
	<i>Solanum (Geminata) laxiflorum</i> Sendtner	ES	KB	
GODYRIDINI				
<i>Godyris zygia</i> (Godman & Salvin)	<i>Cestrum nocturnum</i> L.	CR	WH	
	<i>Cestrum</i> sp. (13)	CR	LG	
<i>gonussa caesiopicta</i> (Niepelt)	<i>Solanum (Geminata) brenesii</i> Morton & Standley	CR	AY	
<i>zavaleta matronalis</i> (Weymer)	<i>Cestrum</i> sp. (7334)	Lim	BD	
	<i>Cestrum laevigatum</i> Schldl.	Lim	BD	
ssp. nov.	<i>Solanum (Geminata)</i> sp.?	Acre	KB	
ssp. nov.	<i>Cestrum</i> sp. (decumbent)	Rond	KB	
<i>kedema kedema</i> (Hewitson)	<i>Solanum (Geminata)</i> nr. <i>ripense</i>	Ven	KB	
<i>Pseudoscada timna</i> (Hewitson)	<i>Cestrum</i> sp. (7324)	Lim	BD	
<i>erruca</i> (Hewitson)	<i>Cestrum schlechtendalii</i> G. Don	Camp	KB	
	<i>Cestrum laevigatum</i> Schldl.	Camp	JVN, KB	
	<i>Cestrum corymbosum</i> Schldl.	Japi	KB	
	<i>Cestrum</i> sp.	MG	KB	
	<i>Cestrum</i> sp.	San-Ec	KB	
	<i>Cestrum</i> sp.	Col	KB	
<i>Hypomenitis alphasiboea</i> (Hewitson)	<i>Cestrum fragile</i> Francey	CR	WH	
<i>libethris</i> (Felder & Felder)	<i>Cestrum megalophyllum</i> Dunal	CR	WH	
<i>Greta polissena</i> (Hewitson)	<i>Cestrum nocturnum</i> L.	CR	WH	
	<i>Cestrum rugulosum</i> Francey	CR	WH	
	<i>Cestrum lanatum</i> C. Martius & Gal.	CR	WH	
	<i>Cestrum</i> sp.	CR	WH	
	<i>Cestrum</i> sp.	CR	WH	
	<i>Cestrum</i> sp.	CR	WH	
<i>morgane oto</i> (Hewitson)	<i>Cestrum lanatum</i> C. Martius & Gal.	CR	WH	
<i>andromica lyra</i> (Salvin)	<i>Cestrum</i> sp. (13)	CR	WH	
<i>andromica</i> (Hewitson)	<i>Solanum (Geminata)</i> nr. <i>ripense</i>	Ven	LG	
			KB	



TABLE 1. Continued.

Ithomiinae:		Host Plants <sup>1</sup> :		Source <sup>3</sup>	
Tribe, Genus, Species, and Subspecies	Genus (Subgenus or Section) and Species	Locality <sup>2</sup>	Source <sup>3</sup>	Locality <sup>2</sup>	Source <sup>3</sup>
<i>cubana</i> (Herrich-Schaeffer)	<i>Cestrum</i> sp.	Cuba	JG		
<i>nero</i> (Hewitson)	<i>Cestrum</i> sp.	CR	WH		
	<i>Cestrum standleyi</i> Francey	CR	AY		
<i>annette annette</i> (Guérin)	<i>Cestrum</i> sp.	CR	AY		
	<i>Cestrum fragile</i> Francey	CR	WH		
	<i>Cestrum</i> sp.	CR	WH		
	<i>Solanum (Brevantherum) cordavense</i> Sessé & Moc.	CR	WH		
<i>McClungia salonina salonina</i> (Hewitson)	<i>Cestrum sendnerianum</i> C. Martius	Sum	JVN		
	<i>Cestrum schlechtendalii</i> G. Don	Camp	KB		
	<i>Cestrum laevigatum</i> Schldl.	Sum	JVN		
	<i>Cestrum megalophyllum</i> Dunal	CR	WH		
<i>Hypoleria cassotis</i> (Bates)	<i>Cestrum</i> sp.	CR	WH		
	<i>Solanum (Geminata)</i> sp.?	CR	AY		
<i>ocalea</i> (Doubleday & Hewitson)	<i>Cestrum latifolium</i> Lam.	Trin	MB		
<i>orolina</i> (Hewitson)	<i>Cestrum</i> sp. (7353)	Lim	BD		
<i>adasa</i> (Hewitson)	<i>Cestrum sessiliflorum</i> Schott ex Sendtner	MG	KB		
<i>Heterosais nephele</i> (Bates)	<i>Cestrum</i> sp.	Japi	KB		
	<i>Cestrum</i> sp. (7324)	Lim	BD		
	<i>Cestrum</i> sp. (decumbent)	Rond	KB		
<i>edessa</i>	<i>Cestrum amictum</i> Schldl.	MG	KB		

<sup>1</sup> In the genus *Solanum*, sections *Micracantha*, *Lasiocarpa* and *Acanthophora* are in the subgenus *Leptostemonum*; sections *Androceras* and *Jasminosolanum* are in subgenus *Potateo*, which some feel could also include *Lycopersicon* and *Lycianthes* as sections (here treated as genera); and sections *Geminata* (= *Leiodendron* auct. or *Leiodendron* auct., see S. Knapp, Taxon 32: 635-636, 1983), *Indubitaria*, *Lepidota* and *Pseudocapsica* are for the time being placed next to each other in subgenus *Solanum*.

<sup>2</sup> Alphabetical list of locality codes:  
 Acre = near Rio Branco, Acre, SW Brazil, 50 m.  
 Amp = Lourenço, Amapá, extreme N Brazil, 100-300 m.  
 Arg = Argentina, various localities in northern part of country.  
 BA = Ubatã and Catu, eastern Bahia, Brazil, 20-100 m.  
 Barn = Barinitas, Barinas, Venezuela, 800-1,500 m.  
 Belém = Region of Belém and Bujaru, Pará, Brazil, 20 m.  
 Bol = Region of Caranavi, La Paz, Bolivia, 800 m.  
 Bra = Brazil, various regions, mostly southeastern.

BrsL = Brasília, Distrito Federal, Brazil, 1,000-1,200 m.  
 Camp = Region of Campinas, São Paulo, Brazil, 600-800 m.  
 Car = Serra dos Carajás, southern Pará, Brazil, 200-700 m.  
 Col = Colombia, mostly Villavicencio area, Meta, 400-1,500 m.  
 CR = Various localities in Costa Rica, sea level to 1,600 m.  
 Cuba = Probably eastern part of the island of Cuba.  
 EIS = El Salvador, mostly western sector.  
 ES = Northern Espírito Santo, eastern Brazil, 20-800 m.  
 Faro = Faro, western Pará, Brazil, 20 m.  
 Goiás = Santo Genoveva, Goiânia, and Goiás Velho, state of Goiás, Brazil, 600 m.  
 Itat = Parque Nacional de Itatiaia, Rio de Janeiro, SE Brazil, 1,000-2,000 m.  
 Japi = Serra do Japi, Jundiá, São Paulo, SE Brazil, 800-1,200 m.  
 Lim = Limoncocha, eastern Ecuador, 280 m.  
 Linh = Linhares, Espírito Santo, eastern Brazil, 20 m.  
 Man = Region north of Manaus, Amazonas, Brazil, 50-100 m.

- Marajó = Central part of Ilha de Marajó, mouth of Amazon, Pará, Brazil, 10 m.
- Mex = Tuxtlas and Sierra de Juárez, Veracruz, México, 200–1,600 m.
- MG = Mongaguá, coastal São Paulo, SE Brazil, sea level to 300 m.
- Mogi = Fazenda Campininha, Mogi-Guaçu, São Paulo, SE Brazil, 400–550 m.
- MTN = Western part of the state of Mato Grosso (do Norte), western Brazil, 200–500 m.
- NPer = Jaén, Pucará, and Tumbes, northern Peru, 600–2,000 m.
- Pan = Panamá, various localities, sea level to 2,000 m.
- PCal = Poços de Caldas, Minas Gerais, Brazil, 1,000–1,800 m.
- Peru = Central Peru.
- Pnb = Pernambuco, NE Brazil, 50–250 m.
- RCl = Rio Claro, São Paulo, SE Brazil, 600 m.
- RGS = Rio Grande do Sul, extreme southern Brazil, sea level to 1,000 m.
- Rio = Region of Rio de Janeiro, SE Brazil, sea level to 800 m.
- Rond = Rondônia, SW Brazil: Colorado, Jaru, Theobroma, Ariqueemes, 200–600 m.
- Ror = Roraima, extreme northern Brazil, 50–200 m.
- Rrpl = Rurópolis, Pará, Brazil, 100 m.
- San-Ec = Upper Santiago river basin (Macas to Gualaquiza and Zamora), east Ecuador, 800 m.
- SEc = Southern Ecuador.
- 7Lg = Sete Lagos, northeast of San Gabriel de Cachoeira, upper Rio Negro, Amazonas, NW Brazil, 100–200 m.
- SNegra = Serra Negra, São Paulo, SE Brazil, 900–1,400 m.
- Sum = Sumaré, São Paulo, Southeast Brazil, 550–600 m.
- Sur = Suriname coast, sea level.
- SV = São Vicente, coastal São Paulo, SE Brazil, 20–300 m.
- Trin = Trinidad, sea level to 800 m.
- Tuc = Tucuruí, Rio Tocantins, Pará, Brazil, 30 m.
- UR = Uruguay, various localities.
- Ven = Northern Venezuela, various localities, sea level to 2,000 m.
- WEc = Coastal plain of Western Ecuador, sea level to 700 m.
- <sup>3</sup> Alphabetical list of reference codes, sources of data:
- AM = Muyschondt, A. 1976. *Rev. Soc. Mex. Lep.* 2: 77–90.
- AY = Young, A. M., see 1980. *Acta Biotheoretica* 29: 37–64 for bibliography.
- AY/M = Young, A. M. & M. W. Moffatt. 1979. *Dtsch. Ent. Z.*, N.F. 26: 21–38.
- BD = Drummond, B. A., III. 1976. Ph.D. Thesis, University of Florida, Gainesville, and further observations and corrections through 1984.
- BL = Ballou in Costa Rica, reported by Lamas, G. 1973. Ph.D. Thesis, Universidade de São Paulo, Brazil.
- CB = Biezanko, C. M. various publications, especially 1957 (with collaborators). *Rev. Fac. Agron. Montevideo* 46: 1–152, and 1960. *Arq. Entom. Rio Grande do Sul* III, A: 1–6 and B: 1–6. Doubtful records have been eliminated, and those presented here require confirmation.
- DM = de la Maza, J. 1980. *Bol. Inf. Soc. Mex. Lep.* 6: 3–9.
- DS = D'Araújo e Silva et al., 1968, mostly untrustworthy older records from agronomical literature, needing confirmation.
- FA-Mar = Information in the collection of the Facultad de Agronomia, Maracay, Venezuela, including extensive notes by Avril Fox on material deposited mostly in the British Museum (Natural History).
- FM = Müller, Fritz. 1886. *Zool. Jahrb.* 1: 1–225, probably trustable.
- GL = Unpublished information from Gerardo Lamas M., Lima, Peru, and also 1976. *Rev. Per. Ent.* 18: 2.
- GS = Observations of Gordon B. Small in Panamá.
- JAE = Published and unpublished observations by John A. Edgar, especially in 1982. *J. Zool. London* 196: 385–399, and (with collaborators) 1974. *Nature* 250: 646–648.
- JFZ = Unpublished records of J. F. Zikán in SE Brazil, many questionable.
- JG = Gundlach, J. 1881. *Contribución a la Entomologia Cubana*. Havana.
- JLG = Guppy, J. L. 1894. *J. Trinidad Field Nat. Club* 2: 170–174; 1904. *Trans. Ent. Soc. London* 52: 225–228.
- JS = Sepp, J. 1828–1855. *Surinaamsche Vlinders*, 3 volumes. Amsterdam.
- JVN = Vasconcellos-Neto, J. 1980. M.Sc. Thesis, Universidade Estadual de Campinas, São Paulo, Brazil.
- KB = Mostly unpublished records of Keith Brown, recently with much participation of Renata S. C. Dias, also 1976. *Acta Amazonica* 7: 75–137. 1977. *Syst. Ent.* 2: 161–197. 1980. *J. Lep. Soc.* 32: 152–172. (With R. F. D'Almeida) 1970. *Trans. Amer. Ent. Soc.* 96: 1–17. (With W. W. Benson) 1974. *Biotropica* 6: 205–228.
- KH = Hayward, K., information in various catalogues of Argentinian Lepidoptera.
- LG = Unpublished information of L. E. Gilbert, mostly in a 1968 OTS report, with later corrections of plant names and more recent observations.
- MB = Barcant, M. 1970. Butterflies of Trinidad and Tobago. Collins, London.
- MF = Drawings of Margaret Fountaine, deposited in the British Museum (Natural History), also 1913. *Entomologist* 46: 189–194, 214–219.
- NM = Moreira, N. 1881. *Arch. Mus. Rio de Janeiro* 4: 1–13, probably trustable.
- PCM = Paulo Cesar Motta, Central São Paulo.
- RF = Fox, R. M. 1967. *Mem. Amer. Ent. Soc.* 22: 1–190.
- RFD = D'Almeida, R. Ferreira, 1922. *Mélanges Lepidopterologiques*. Berlin. 1938. *Mem. Inst. Oswaldo Cruz* 33: 381–394. 1944. *Arq. Zool. Ent. São Paulo* 4: 33–72, many records requiring verification.
- RM = Monteiro, R. F. 1981. M.Sc. Thesis, Univ. Estadual de Campinas, SP, Brazil.
- R/P = Rathcke, B. J. & R. W. Poole. 1975. *Science* 187: 175–176.
- SK = Unpublished recent observations of S. Knapp and J. Mallet, Guyana and Peru.
- WB = Unpublished observations of Woodruff W. Benson.
- WH = Haber, W. 1978. Ph.D. Thesis, University of Minnesota, and more recent observations and updates of this large data set from Costa Rica.